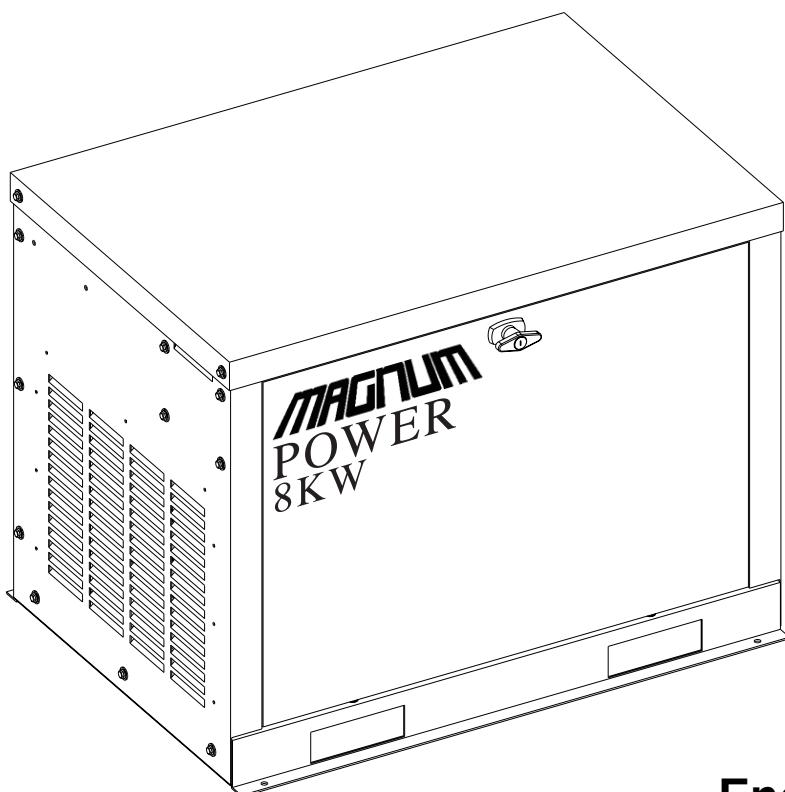


# Table of Contents

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# MAGNUM POWER 8KW

## NATURAL GAS / LP GAS



Manual Part #: 25109

Revised Date: 1/8/01

**B**

Specifications .....	2
Safety Precautions .....	3-5
Introduction .....	6-7
Controller Features .....	6
Hour Meter .....	6
Switches .....	6
Automatic Fault Shutdown .....	6
7-amp Controller Fuse .....	6
Circuit Protection .....	6
Starting the Generator Set .....	7
Auto Start .....	7
Manual Start .....	7
Controller Resetting Procedure .....	7
Installation .....	8-9
Voltage Connection Diagram .....	8
Typical Installation .....	9
Operation .....	10-13
Stopping Procedure .....	12
Fuel System .....	12
Battery .....	12
Storage Procedure .....	13
Cooling .....	13
Schematic .....	14
Trouble Shooting .....	15-16
Service Schedule .....	17
Parts .....	18-21
Enclosure .....	18-20
Notes .....	21
Control Box .....	22-23
Warranty .....	24

**Engine Serial #** \_\_\_\_\_

**Engine Model #** \_\_\_\_\_

**MAGNUM**  
PRODUCTS, INC.

918 Knopf Road  
Berlin, Wisconsin 54923  
Ph: (920) 361-4442 Fax: (920) 361-4416  
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# Magnum Power Generator

## Specifications

### Generator

Rated Maximum Power Capacity	8,000 Watts (8kW)
Rated Voltage	120/240 volts, 1Ø
Rated Maximum Load Current at 120/240 volts	66.7/33.3 amps
Driven Speed of Rotor	3600 RPM
Rotor and Stator Insulation	Class "F"
Rated AC Frequency	60 Hz @ 3600 RPM
Recommended Transfer Switch	#25033
Switch Amperage Rating	100 or 200 amps, 250 volts

### Engine

Make	Briggs & Stratton
Model	354447 Type 0044E1
Type of Engine	4-Cycle, air cooled
Number of Cylinders	2
Rated Horsepower (LP Gas)	16 HP @ 3600 RPM
Rated Horsepower (Natural Gas)	13 HP @ 3600 RPM
Displacement	570cc
Valve Arrangement	Overhead Valves
Ignition System	Solid State
Starter	12 volt DC w/Alternator
Air Cleaner	Dual Element
Oil Filter	Full Flow Cartridge
Crankcase Oil Capacity	1.5 U.S. Quarts (Consult engine operators manual for oil recommendations)

## Dimensions

### Generator

Length	35 3/8" (898mm)
Width	24" (609mm)
Height	29" (736mm)
Weight	387 lbs. (175 kg)

## Fuel Consumption

### Generator

Using LP Gas	2.2 Gallons / hour
Using Natural Gas	150 Cubic ft. / hour

# Safety Precautions and Instructions

For safe installation, operation, and maintenance of this product, read and follow the procedures and safety precautions detailed within. Failure to comply with installation procedures, operation procedures, or safety precautions may result in personal injury and/or property damage. Store this manual in a safe place for future reference.



## DANGER

Danger indicates a possible hazardous situation that will cause extreme personal injury, death, or substantial property damage.



## WARNING

Warning indicates a possible hazardous situation that can cause extreme personal injury, death, or substantial property damage.



## CAUTION

Caution indicates a possible hazardous situation that will or can cause minor personal injury or property damage.

## NOTICE

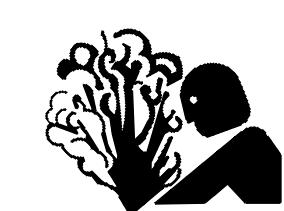
Notice indicates information pertinent to maintenance, installation, or operation. Though the information is important to the reliability of your generator set, it is not hazard related.

## ACCIDENTAL STARTING



Accidental starting can cause serious injury or death. Before doing any work on the generator set, turn master switch to the OFF position, and remove the battery cables from the battery (negative terminal first). This will prevent the generator start mechanism in the automatic transfer switch from starting the generator set. When the work is complete reconnect the positive terminal first.

## BATTERY



Batteries contain sulfuric acid, which can cause severe injury or death. Sulfuric Acid can cause permanent eye damage, burn flesh, and eat holes in clothing. Protective eye wear and clothing are necessary when working on or around the battery. If acid splashes in or around the eyes, flush with water for 15 minutes. Seek immediate medical attention.

## EXPLOSION



Explosions can cause severe injury or death. The Battery and Trickle Charge should be stored in a well-ventilated area away from explosive fumes.

## ENGINE FUEL SYSTEM



Fire can cause severe injury or death. Do not smoke or permit others to smoke in the vicinity of the fuel line, carburetor, fuel filter, fuel pump, or other sources of fuel (vapor or liquid fuels). The fuel lines and connections should all be professionally checked for leaks at the point of installation. Periodic inspections of the fuel lines and connections is recommended. Use a soap solution to identify any possible leaks. Do not use a solution containing ammonia or chlorine, neither produce bubble formations.

## MOVING OR ROTATING PARTS



Moving or rotating parts can cause severe injury or death. Keep hands, hair, feet, clothing, jewelry, and test leads away from moving parts. NEVER operate the generator set without the guards and electrical enclosures in place.

## ELECTRICAL SHOCK



The possibility of electrocution is present whenever electricity is present. Open main circuit breakers to all power sources before performing maintenance to the generator set. The generator set should be grounded during installation.

Only a trained professional should perform high voltage tests. The guidelines set forth by the equipment manufacturer need to be followed. Failure to follow the set guidelines can result in damage and/or future generator failure.

## NOISE



Prolonged exposure to sound levels in excess of 85 DBA can cause permanent hearing loss. Hearing protection should be worn when near an operating generator set. Do not operate generator set without functional exhaust system.



Hot parts can cause severe injury or death. During operation, the exhaust system will reach temperatures that can ignite combustible materials and cause severe burns. Make sure that the exhaust system is free of combustible materials at all times.

## EXHAUST SYSTEM



Carbon monoxide gases can cause extreme nausea, fainting, or death. NEVER operate the generator set inside without safely venting the exhaust outside. When installing the generator set outside, insure that the exhaust system is not venting into an enclosed area where the carbon monoxide gases can gather. Carbon monoxide is a colorless, odorless, tasteless gas that can cause severe injury or death with minimal exposure.



Before attempting any maintenance to the generator set, make sure that the generator set has had time to properly cool down.

# Introduction

---

## CONTROLLER FEATURES

The generator controller was specifically designed for standby applications. It is equipped with monitoring and shutdown capabilities to ensure proper function. Any tampering or adjustments to the controller can cause serious injury and/or death.

- ◆ Hour meter
- ◆ Switches
  - AUTO/OFF-RESET/MANUAL
- ◆ Automatic Fault Shutdowns
  - Overcrank
  - Overspeed
  - Underspeed
  - Low Oil Pressure
- ◆ 7-amp Controller Fuse

## AUTOMATIC FAULT SHUTDOWNS

If the generator set fails to start after 5 attempts, the **overcrank shutdown** will be activated. The engine is also equipped with an oil pressure switch that will activate the **low oil pressure shutdown** if the oil pressure drops, and a **high temperature** switch that will activate shutdown. These errors are signified by a solid **RED** light on the control panel.

## 7-AMP CONTROLLER FUSE

A 7-amp fuse protects the generator controller from damaging electrical surges. In the event that the generator shuts down unexpectedly or without apparent cause, check the controller fuse first.

## HOUR METER

The hour meter serves two purposes: it tallies the hours of operation, and it serves as a bench mark for your maintenance schedule.

## SWITCHES

The AUTO/OFF-RESET/MANUAL switch is a three-position toggle switch.

## CIRCUIT PROTECTION

A line circuit breaker has been sized for generator output in the event of an overload or a short circuit. If the generator set circuit breaker trips, reduce the load, and switch the breaker back to the ON position. The generator set will continue to run even if the circuit breaker is in the OFF position, but there will be no output voltage.

## STARTING THE GENERATOR SET

Before starting the generator, the following procedures should be performed to ensure peak performance;

- Check engine oil level, it should be at or near the full mark.
- Visually inspect engine, generator, and exhaust system to ensure that they are free from any obstructions or debris that may block air flow or possibly ignite from contact with hot engine components. The engine compartment should be free of any objects foreign to its design.
- Inspect the battery cables to ensure that they are tightly connected and free of corrosion.
- Maintain a clean air filter to prevent contaminants from entering the engine.

## AUTO START

For remote starting, follow the pre-start checklist, and place the AUTO/OFF-RESET/MANUAL switch in the auto position. When the controller receives the start command from the transfer switch, the starting procedure will begin. If the generator fails to start, the transfer switch will automatically return to utility power. Refer to the troubleshooting section of this manual.

The controller will start the engine if either: 1.) The control switch is in the MANUAL position or 2.) The control switch is in the AUTO position and the remote start contacts are closed. Before attempting to start the engine, the speed input is checked. If it is determined that the engine is already running, only the fuel solenoid is energized. Otherwise, the controller will attempt to start the engine by engaging the fuel solenoid and the starter relay. The speed input is monitored to determine if the engine starts.

If the starting speed is detected, the starter relay is disengaged and normal monitoring is begun after the startup delay period of 10 seconds. This delay allows oil pressure to be established and allows the engine speed to stabilize.

Cranking will continue for 10 seconds if the engine does not start. After this time, the fuel solenoid and the starter relay are disengaged for a rest period of 10 seconds. After the rest period, another crank attempt is performed.

After five unsuccessful attempts, the controller will issue an OVERCRANK shutdown fault. If this occurs follow the guidelines in the troubleshooting section of this manual.

## MANUAL START

After completing the pre-start checklist, place the AUTO/OFF-RESET/MANUAL switch in the manual position. The engine controller will begin the starting procedure detailed above. If the generator does not start, return the switch to the off-reset position for the duration of 10 seconds and return the switch to the manual position. If the generator completes a second starting cycle without successfully starting, refer to the troubleshooting section of this manual.

## CONTROLLER RESETTING PROCEDURE

The following procedure must be used to reset the controller, after a fault condition.

1. Place the toggle switch in the OFF/RESET position.
2. Switch the circuit breaker to the OFF position, and disconnect the load.
3. Correct the fault condition (Refer to fault shut downs).
4. Place the toggle switch in the MANUAL or AUTO position for startup.

# Installation

The Magnum Power 8KW standby generator was not designed as a do-it-yourself project. Only qualified professionals should install the generator in compliance with the United States National Electric Code (NEC), state and local codes, and Occupational Safety and Health Administration (OSHA).

It is equally important to carefully plan the installation in conjunction with the qualified installation professionals. Things to take into consideration are:

- Location of the generator indoor or outdoor. (Proper exhaust ventilation is necessary and the area should be in a place that is not prone to flooding)
- The generator must be mounted on a solid foundation, a 3" cement slab is recommended along with anchoring the unit to the foundation with bolts. Allow 3 feet of clearance around the entire generator for maintenance, service, & exhaust gases.
- The location must provide adequate airflow for engine and generator cooling. To prevent damage to the generator set caused by overheating, ensure that all air inlets and outlets are free from obstruction at all times.
- The transfer switch must be sized appropriately to handle the ampere rating.
- The generator's voltage and phase ratings must be in accordance with the utility supply and load circuit voltage and phase rating.
- The generator should never be installed on

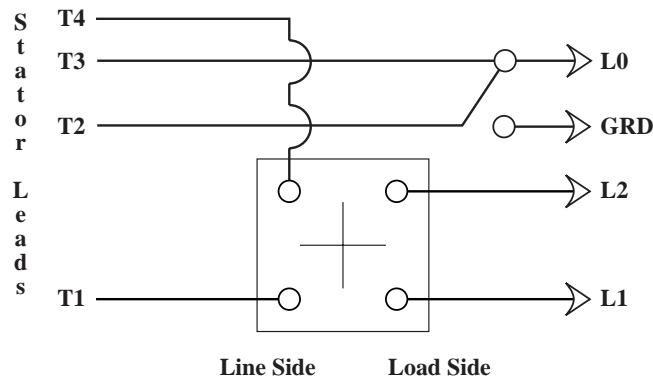
combustible material. If the installation location is made of combustible material, the qualified installation professional must take the necessary measures to insulate the generator from the combustible materials.

- Decide what your critical loads are, and choose the proper isolation method.
- Choose which fuel type you would like to use for the generator and locate the generator as close as possible. (All fuel lines need to be checked for leaks)

## VOLTAGE CONNECTION DIAGRAM

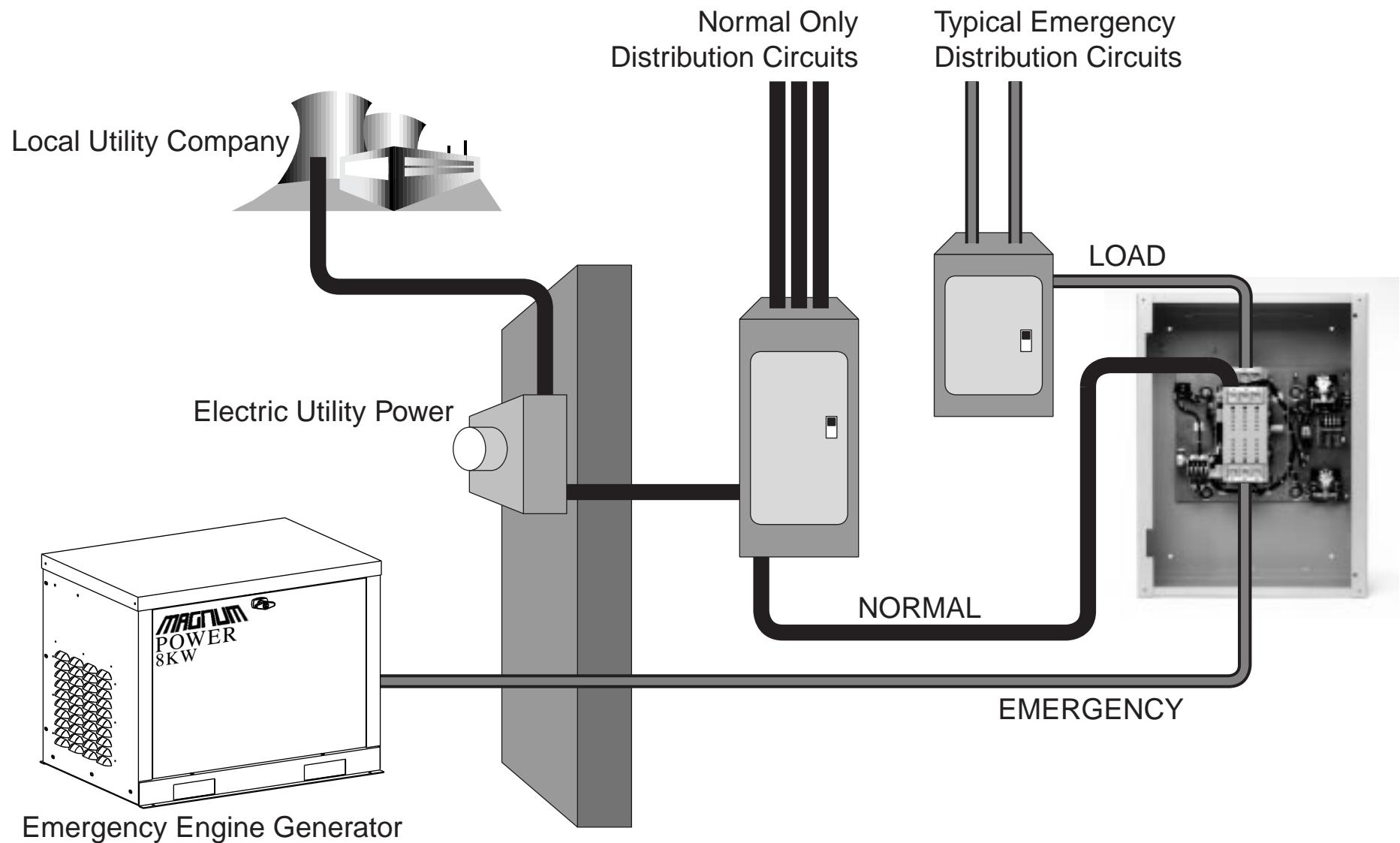
Use the following diagram (see diagram A) and text to help in the generator set voltage connection procedure. Connect 1-phase generator sets to either a 110-120 volt or 200-240 volt configuration.

Never connect Leads L1 and L2 together.



**Diagram A**

# Typical Installation



# Operation

---

## CONTROL PANEL COMPONENTS

1. AUTO/OFF-RESET/MANUAL Switch: Set the toggle switch to the AUTO position for automatic operation. Set toggle switch to the MANUAL position to crank and start the generator engine. Set switch to OFF position to shut down an operating engine. With OFF or MANUAL selected, automatic operation will not be possible.

***With this switch set to AUTO, the engine can crank and start suddenly without warning. Such automatic start up normally occurs when utility source voltage drops below a preset level. To prevent possible injury that might be caused by such sudden starts, set switch to OFF before working on or around the unit.***

2. 7-Amp Fuse: Fuse protects the control panel's DC control circuit against electrical overload. If the fuse has failed open due to an overload, the engine cannot crank and start. When replacing the fuse, use only an identical 7-amp replacement fuse.
3. Main Breaker: Protects the generator against electrical overload. With the breaker in the OFF position, the generator has no output.
4. Fault LED: Help to trouble shoot problems.
  - a. If the generator is placed in the auto position, the LED light will flash green.
  - b. If the generator is cranking over, it will be a solid yellow. If the generator does not start, the LED will flash yellow until the next cranking attempt.
  - c. The red light is for all fault conditions. The number of flashes signifies what fault has occurred:
    - One Flash: Oil Pressure
    - Two Flashes: Over Crank
    - Three Flashes: Over/Under Speed
    - Four Flashes: Battery Voltage

## MANUAL START AND TRANSFER

To start the engine manually and transfer load circuits to the EMERGENCY (standby) power source manually, proceed as follows:

1. Check for proper manual operation of the automatic transfer switch, using a manual handle.

### **WARNING**

***Do not try MANUAL operation of the transfer switch until all power supplied to the switch has been positively turned OFF. Failure to turn OFF the supplied power may result in an extremely dangerous and potentially lethal electrical shock.***

2. After verification that transfer switch operates manually, actuate the transfer switch main contacts to the UTILITY position, i.e., LOAD terminals connected to the utility power supply.
3. Turn ON the utility power supply to the transfer switch with whatever means provided. With an AC voltmeter, verify that correct load voltage is available at transfer switch main contact, terminal lugs N1 and N2.
4. On the generator control panel, set the AUTO/OFF-RESET/MANUAL switch to the OFF position.
5. Turn OFF the utility power supply to the transfer switch, with whatever means provided.
6. Set the generator's main circuit breaker to the OFF position.

7. Turn off all electrical loads. Initial testing and adjustment should be conducted with the generator at "no-load."
8. To start the generator engine manually, set the AUTO/OFF-RESET/MANUAL switch to the MANUAL position, engine starts. Let the unit stabilize and warm up for a few minutes.
9. Set the main circuit breaker on the generator to the ON position.
10. With an accurate AC voltmeter, verify that correct rated voltage and frequency are being supplied to transfer switch terminals E1, E2, and neutral.
  - a. Do not proceed until generator output frequency and voltage are correct.
  - b. If AC frequency is not within 60-62 Hz at no-load, contact authorized service technician.

***DO NOT attempt to adjust the governor. Only qualified service facilities should adjust the governor. Excessively HIGH operating speeds are dangerous and increase the risk of personal injury. LOW speeds impose a heavy load on the engine when adequate engine power is not available and may shorten engine life. Correct rated frequency and AC voltage are supplied only at the proper governed speed. Incorrect AC frequency and/or voltage may damage some connected electrical load devices. IT IS RECOMMENDED THAT ONLY QUALIFIED SERVICE TECHNICIANS ADJUST THE ENGINE GOVERNOR.***

***NOTE: On units connected for 240 volts, 1 phase output, line-to-line voltage at 62 Hz should be 240-250 volts. Take these initial readings with the generator running at no-load.***

**IMPORTANT: DO NOT PROCEED UNTIL NO LOAD FREQUENCY AND VOLTAGE ARE CORRECT.**

11. Verify that all utility power has been turned OFF to the transfer switch with whatever means provided. Then, manually actuate the transfer switch main contacts to the STANDBY position, i.e., LOAD connected to the GENERATOR.
12. Turn ON electrical loads that almost equal the generator's wattage amperage capacity. With an AC frequency meter, check frequency at transfer switch terminals E1 and E2. With generator under load, frequency should not drop below 58 Hz.
13. Let the generator run under load for at least 20-30 minutes. Check for unusual vibration, noise, high temperature, and other indications of abnormal operation.

**MANUAL RETRANSFER AND SHUT DOWN**

Electrical loads may be retransferred back to the utility power and the generator can be shutdown as follows:

1. Verify that utility power supply to the transfer switch has been positively turned OFF, using whatever means provided (such as the utility main line circuit breaker).
2. Set the generator's main circuit breaker to its OFF position.
3. Let the generator engine run at no-load for several minutes to stabilize internal unit temperatures.
4. On the generator control panel, set the AUTO/OFF-RESET/MANUAL switch to OFF. Wait for engine to come to a complete stop.

5. With the manual transfer handle, move the switch's main contact back to the utility power position, thereby, reconnecting the utility power supply.
6. Turn ON the utility power supply to the Transfer Switch, using whatever means provided (such as a utility main line circuit breaker). The utility power source now powers the loads.
4. If the utility source voltage is restored, above the preset level, the transfer switch monitors the voltage for a period of time. After this time the switch retransfers load circuits back to the utility power source.
5. After load circuits are retransferred, the engine will go through its cool down procedure before shutting down.

## AUTOMATIC OPERATION

To set the system for fully automatic operation, proceed as follows:

1. Check that load circuits are connected to the utility power supply.
2. Set the AUTO/OFF-RESET/MANUAL switch to the AUTO position.
3. Set the generator main circuit breaker to its ON position.

## AUTOMATIC OPERATING SEQUENCE

The automatic operation is controlled by the automatic transfer switch. For a more exact description of automatic operating sequence, see Transfer Switch Instruction Manual. The sequence of automatic operation is briefly described as follows:

1. Should the utility source drop below a preset level, a delay timer starts.
2. After the delay time, the transfer switch sends a signal to the engine remote contacts to start.

***Note: The delay timer is provided to override momentary outages & prevent nuisance starting of the genset.***

3. The transfer switch senses the voltage of the emergency source. When the emergency source reaches a preset level, transfer delay timing begins. When this time is completed, the load circuits are transferred to the emergency source.

## FUEL SYSTEM

Either Natural Gas or LP gas can fuel the genset. The genset is equipped with an electric fuel solenoid. The solenoid will adjust for either fuel type with a flip of a switch. A toggle switch on the back side of the control box allows you to choose the desired fuel type. Place the switch to NG for natural gas or LP for LP gas.

***Note: Fuel pressure coming into fuel shut off valve should be adjusted to 11-14 inches of water.***

## BATTERY

It is recommended that a 12-volt battery with a minimum of 450 cold cranking amps be used for the genset. The climate will be a major factor in deciding the appropriate battery. If the temperature dips below 0- F for extended lengths of time, a more powerful battery may be necessary. Consult your local dealer/distributor for assistance.

If the genset is not run on a regular basis, it is recommended to use an external battery charger to sustain full charge. Follow the safety precautions in the beginning of this manual when servicing the battery. Batteries contain sulfuric acid, which can cause permanent eye damage, burn skin, and eat holes in clothing. Battery gases can cause an explosion, which can cause severe injury or death.

Take extreme care when removing and replacing battery terminals, reversed connections can cause severe damage to the genset.

## STORAGE INSTRUCTIONS

Recommended storage procedure for the engine:

- Run the engine for 5 minutes to warm the engine.
- Drain oil from the crankcase.
- Refill with fresh oil of recommended grade (see chart page 3 engine manual).
- Remove spark plugs and pour 1oz. of engine oil into cylinders.
- Replace spark plugs and crank slowly to distribute oil.
- Clean dirt and chaff from cylinders, cylinder head fins, blower housing, rotating screen and muffler (see page 7 engine manual).
- Start generator, shut off fuel supply, and let the engine stop from lack of fuel.
- Disconnect fuel source and cap fuel inlet to engine.

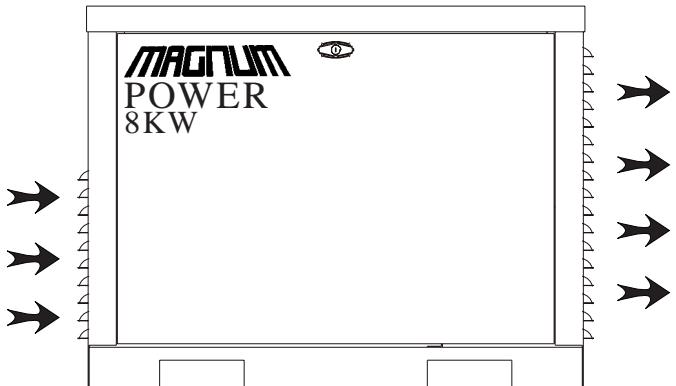
Enclosure and Generator preparation:

- Disconnect battery terminals, clean, and wrap with non-absorbent adhesive tape.
- Remove dirt and dust from outside and inside of cabinet.
- Remove any objects foreign to the genset's design.
- Store in a clean and dry area, but NOT near a stove, furnace, or water heater which uses a pilot light or any device that can create a spark.
- It is also recommended to place a tarp over the entire unit to prevent dust and dirt build-up.

## COOLING

The genset is powered by an air cooled Briggs & Stratton V-Twin engine, and it is imperative for proper operation and longevity, that the cooling system works as designed (see diagram B). The engine draws in air from the engine side, and blows the air across the engine, exhaust, generator end, and out the opposite end of the enclosure. The enclosure for the genset was designed to take in and blow out a specific amount of air.

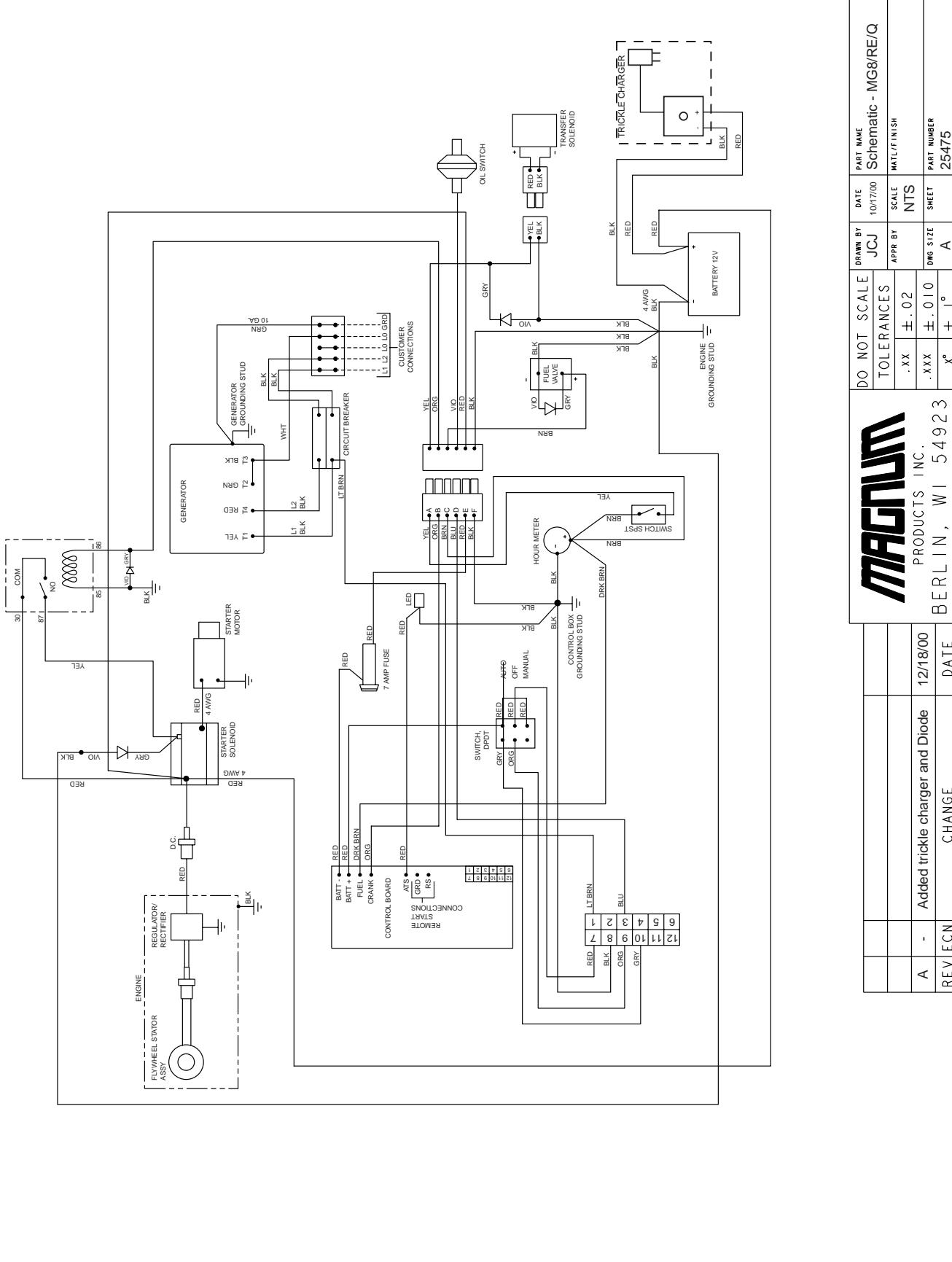
***ANY OBSTRUCTIONS TO THE AIRFLOW CAN CAUSE SEVERE ENGINE AND GENERATOR DAMAGE FROM OVERHEATING.***



***Diagram B***

It is recommended to place the generator in an open area with a minimum of three feet of clearance on all sides for an ample supply of fresh air.

# Point to Point Wiring Diagram



# Troubleshooting

***When problems arise with the generator set, don't overlook the obvious solutions. More times than not, a simple solution will fix your problem. Call your local dealer/distributor for assistance.***

<b><u>Problem</u></b>	<b><u>Possible</u></b>	<b><u>SourceSolution</u></b>
Genset does not turn over.	Poor battery connections or cables are reversed.  Controller fuse is blown.  AUTO/OFF-RESET/MANUAL Switch is off.  Defective AUTO/OFF-RESET/MANUAL Switch.	Inspect cable connections for corrosion and correct placement.  Inspect fuse and replace if necessary.  Place switch in desired position.  Perform a function test.
Genset turns over, but does not start, or starts and runs with difficulties.	Fuel source.  Primary and Secondary Regulators.  Weak Battery.  Fouled spark plugs or loose connection.  Engine timing off.  Low oil pressure shut down. (LED will be steady Red)	Check to insure that the correct fuel source has been selected. Also, inspect fuel lines to insure that the generator set is receiving the appropriate level of fuel pressure.  Perform a function test.  Check voltage and recharge or replace.  Inspect spark plugs, and replace if necessary. Check for tight connect to spark plug wire.  Service engine.  Check oil level and pressure. If both are within the recommended levels, check controller for function.

<u>Problem</u>	<u>Possible</u>	<u>SourceSolution</u>
No AC output from generator.	Engine problems.  Main Breaker in off position.  Main Breaker tripping from overload.  Main Breaker tripping from a short circuit.  Generator problem.	Service engine.  Place breaker in the on position.  Reduce the load on the generator.  Find the short in the system and correct.  Contact your local dealer or distributor for assistance.
Low output (Frequency)	Overloading generator.  Faulty capacitor.  Generator problem.	Reduce the load on the generator.  Replace capacitor.  Contact your local dealer or distributor for assistance.
High output (Frequency)	Faulty capacitor.  Generator problem.	Replace capacitor.  Contact your local dealer or distributor for assistance.
Generator stops suddenly.	No Fuel.  Low oil pressure shutdown. (LED will be steady Red)  Overcrank shutdown. (LED Will be steady Red)  Blown Controller Fuse  Engine Problems.	Check fuel source.  Check oil level and pressure.  Place the controller in the off position for 30 seconds and return to desired position. If the automatic shut down occurs again, check the generator system and controller.  Replace fuse. If it blows again, inspect controller for faults.  Service engine.

# Service Schedule

## DUSTY OR DIRTY OPERATING CONDITIONS

If the generator set operates under these conditions, use dry compressed air to blow out the generator. With the generator set running, direct air through the slots at the engine end of the generator set.

## ENGINE SERVICE

Perform routine maintenance at specified intervals as documented in the Briggs & Stratton Engine Manual supplied with this generator set.

## TUNE-UPS

Have the generator set tuned-up by an authorized distributor. Tune-ups will improve performance and maintain reliability of the generator set during its long lasting service life.

## SCHEDULED SERVICE

Perform scheduled service at every scheduled interval to ensure satisfactory operation of the generator set. If rough operation, lack of power, or excessive oil use is apparent, have an authorized distributor service the generator set. Serious generator set problems can be prevented with immediate action.

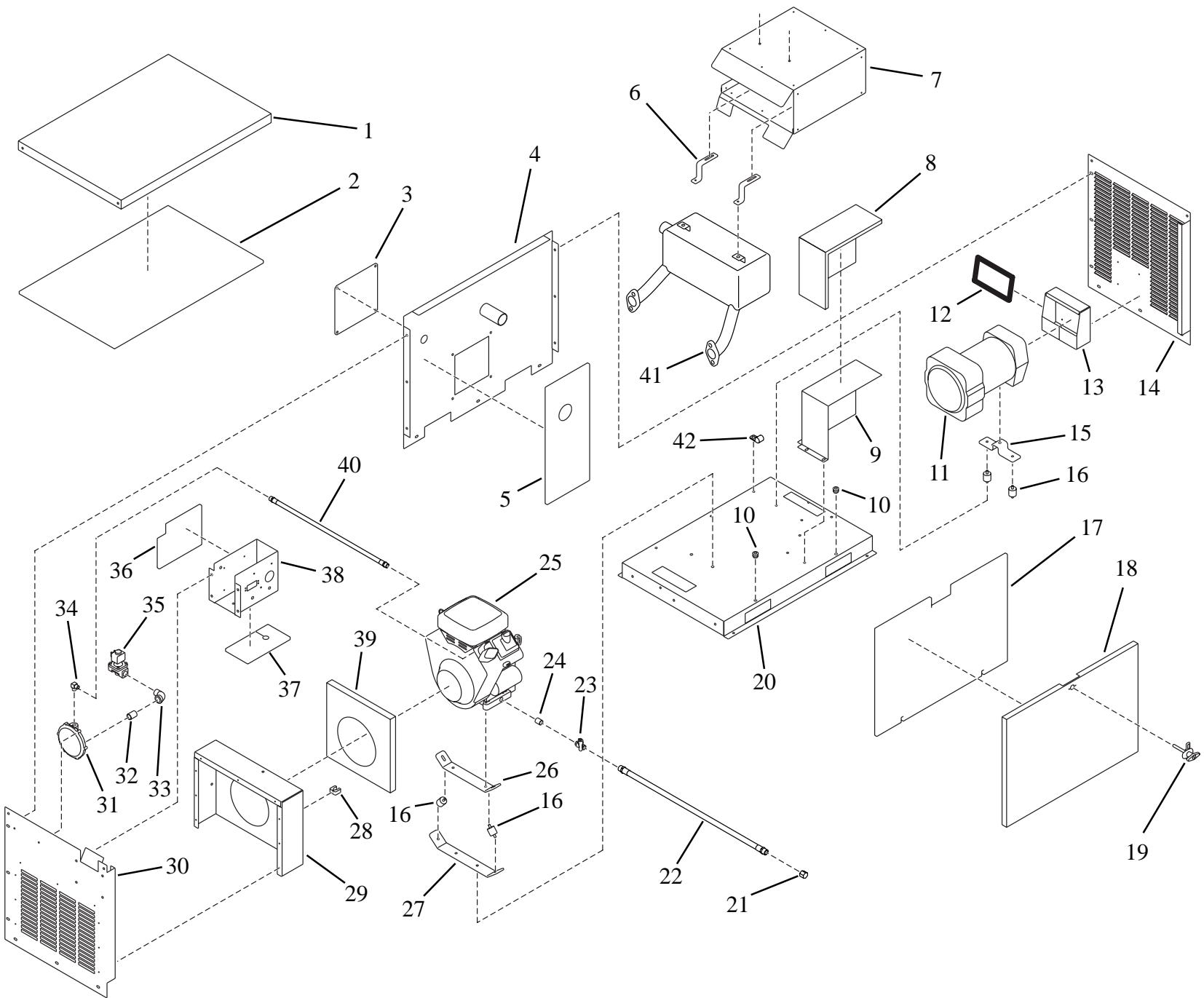
Component	Frequency				
	5 Hours or Daily	Weekly	25 Hours or Every Season	50 Hours or Every Season	100 Hours or Every Season
<b>Fuel</b>					
Inspect flexible lines and connections		●			
Check solenoid valve operation		●			
<b>Cooling</b>					
Air cleaner		●			
Louvers					●
<b>Exhaust System</b>					
Inspect Insulation				●	
Check Muffler bracket				●	
Inspect Muffler box for fire hazards					●
<b>Engine</b>					
Check oil level	●				
Change oil ♦			●	✓	
Change oil filter ♦					● ✓
Change air cleaner pre-cleaner			●		
Change air cleaning cartridge				● ✓✓	
Clean cooling system				● ✓✓	
Check valve lash				●	
Replace or clean spark plugs				●	
Replace in-line fuel filter (Not supplied with unit.)				●	
Clean combustion chamber deposits					●
<b>Electrical System</b>					
Inspect battery and battery tray (Not supplied with unit.)		●			
Clean and tighten battery terminals		●			

♦ Change oil after first 8 hours, then after every 50 hours or every season.

✓ Change oil every 25 hours when operating under heavy load or in high temperatures.

✓✓ Clean more often under dusty conditions or when airborne debris is present. Replace air cleaner parts, if excessively dirty.

# Parts MG8



# Parts MG8

Item #	Part No.	Qty.	Description
1	25049	1	Panel, Top
2	25210	1	Insulator, Top Panel
3	25053	1	Panel, Back Access
4	25052	1	Panel, Back
5	25209	1	Insulator, Back Panel
6	25115	2	Bracket, Muffler
7	25113	1	Assy, Mufler Box
8	25215	1	Insulator, Battery Box
9	25056	1	Box, Battery
10	25085	2	Grommets, Rubber
11	25061	1	Generator
12	25212	1	Insulator, Generator
13	25069	1	Duct, Generator
14	25050	1	Panel, Right Side
15	25101	1	Bracket, Generator Mount
16	25068	4	Mount, Isolation
17	25211	1	Insulator, Door
18	25099	1	Assy, Front Door (Includes Door Pins)
-	60199	2	Door Pin
19	25072	1	Handle, Small Locking 'T'
-	25073	1	Lock, Cam
-	25074	1	Keys
20	25098	1	Weldment, Panel - Base
21	19300	1	Cap, Oil Drain
22	25080	1	Drain, Oil Line - 20" Long
23	19280	1	Valve, Ball 90°
24	25081	1	Fitting, Oil Drain
25	25060	1	Engine, Vanguard V-Twin LP/NG
26	25045	1	Bracket, Upper Engine Mount
27	25406	1	Bracket, Lower Engine Mount
28	19041	1	Clip, Spring Holder
29	25070	1	Duct, Engine
30	25051	1	Panel, Left Side
31	25067	1	Regulator, Secondary - Demand
32	25111	1	Nipple, 3/4" x 2"
33	25110	1	Elbow, 90° Street - 3/4" NPT
34	25082	1	Fitting, 90° - 3/8" MNPT both ends
35	25058	1	Valve, Fuel Solenoid - 12V DC
36	25213	1	Insulator, Control Box Back
37	25214	1	Insulator, Control Box Bottom
38	25282	1	Assy, Control Box Complete
39	25208	1	Insulator, Engine Duct
40	25086	1	Hose, Fuel Line 1/2" FNPT one end - 20" Long
-	19453	2	Clamp, Worm 11/16" OD Hose

# Parts MG8

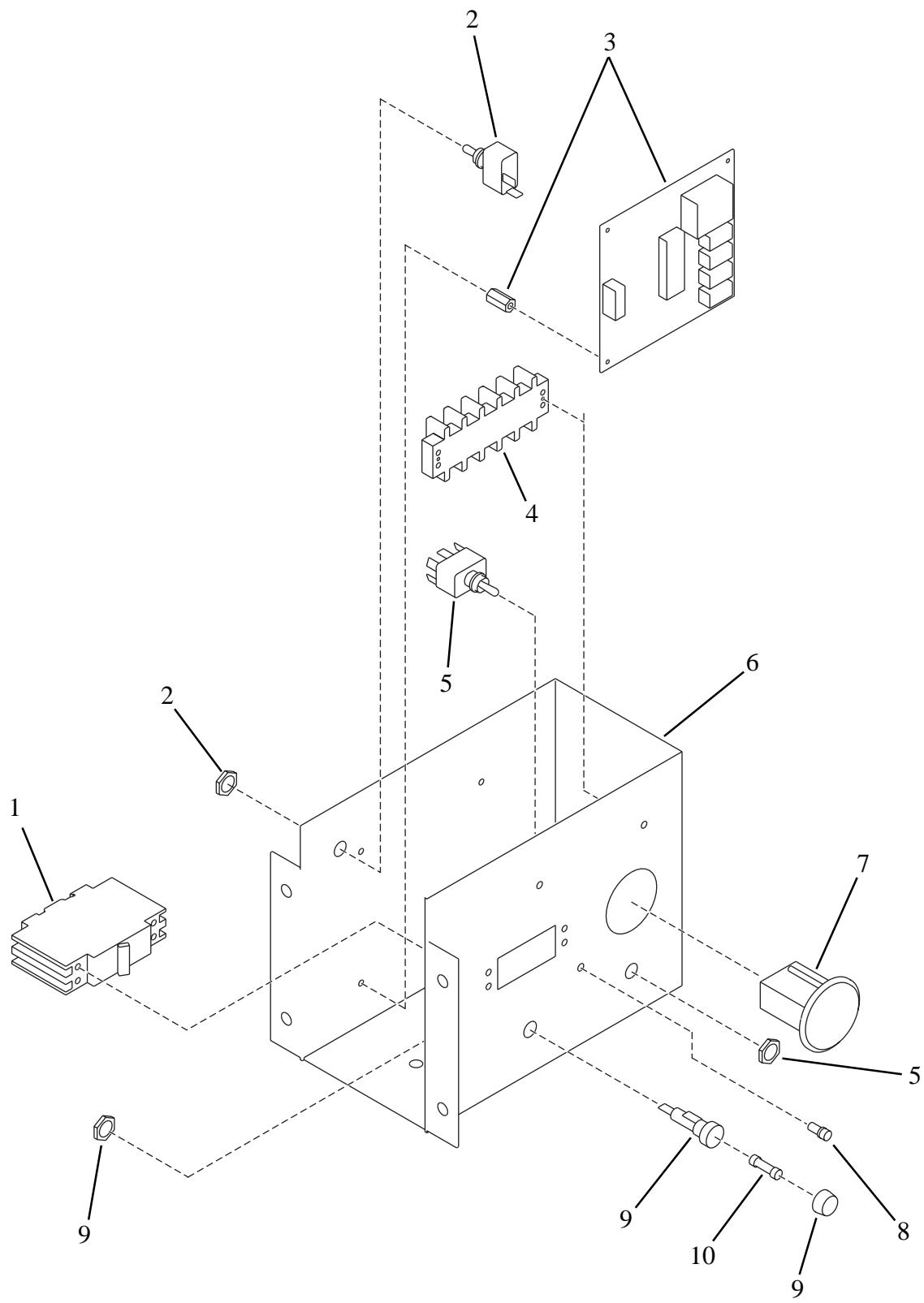
Item #	Part No.	Qty.	Description
41	25059	1	Muffler, Residential Grade
42	15627	5	Clamp, Tubing .625 Heavy Duty
Not Shown	25065	1	Rod, Coupling
Not Shown	25064	1	Flange, Coupling
Not Shown	25057	2	Gasket, Muffler
Not Shown	25283	1	Harness, Engine - Wiring
Not Shown	25120	1	Harness, Generator - Wiring

# Notes

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# Parts MG8

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# Parts MG8

Item #	Part No.	Qty.	Description
1	65038	1	Breaker, Circuit 40 Amp 2-Pole
2	25077	1	Switch, Toggle - NG/LP Conversion
3	25276	1	Board, Controller
4	25079	1	Strip, Terminal
5	25078	1	Switch, Toggle - Auto/Off/Manual
6	25048	1	Box, Controller
7	15085	1	Gauge, Hourmeter
8	25112	1	LED, Mode Indicator
9	25083	1	Holder, Panel Mount Fuse
10	65039	1	Fuse, 7 Amp
Not Shown	25121	1	Grommet

# **ONE YEAR or TWO THOUSAND (2000)-HOUR LIMITED WARRANTY**

Your Magnum Power Standby Generator was manufactured, assembled, tested, and inspected by experienced craftsmen. Magnum Products, Inc. warrants the generator set for a period of one year or 2000 hours, which ever occurs first. The following conditions must be met:

- You must be the original consumer.
- Installation and start-up procedures were performed by an authorized professional in accordance with the guidelines published in the operations manual.
- Maintenance schedules and operation procedures detailed in the operations manual were followed.
- Malfunctions or damages were not a result of misuse, unreasonable use, acts of nature or repair and service work performed by an unauthorized person.

## **ITEMS NOT COVERED BY WARRANTY:**

- Maintenance items i.e. spark plugs, air filter, fuses, adjustments, LED's, etc.
- Any rental of the standby generator will void warranty.
- Labor charges for troubleshooting problems will only be covered if a problem is attributed to defective Magnum materials or craftsmanship.
- Any engine fluids that are necessary for normal operation of the generator set.
- Any charges related to the starting battery or the installation of the starting battery.
- The initial installation and start-up charges.
- Damages caused from the following list will not be covered under warranty:
  - Failure to exercise the generator under load.
  - Use of unauthorized service parts, incorrect oil type, or inappropriate oil level.
  - Failure to keep air intake and cabinet free of obstructions and debris.
  - Failure to properly maintain a clean air filter.
  - Failure to maintain the maintenance schedule detailed in the operations manual.

At the point of purchase, a warranty card must be filled out and returned within 45 days to Magnum Products, Inc. If the card is not filled out and returned, the ship date from the factory will be used as the start date for the warranty period.

Magnum Products, Inc. will not be liable for any incidental or consequential damages of any kind without prior authorization from the warranty department. This warranty is exclusive to Magnum Products, Inc. and nobody is authorized to extend the warranty in any way.

\*Engine is warranted for 2 years by Briggs & Stratton. See engine manual for full details.

For warranty service, please call 800-926-9768, or write Magnum Products, Inc., 918 Knopf Rd., Berlin, WI 54923.